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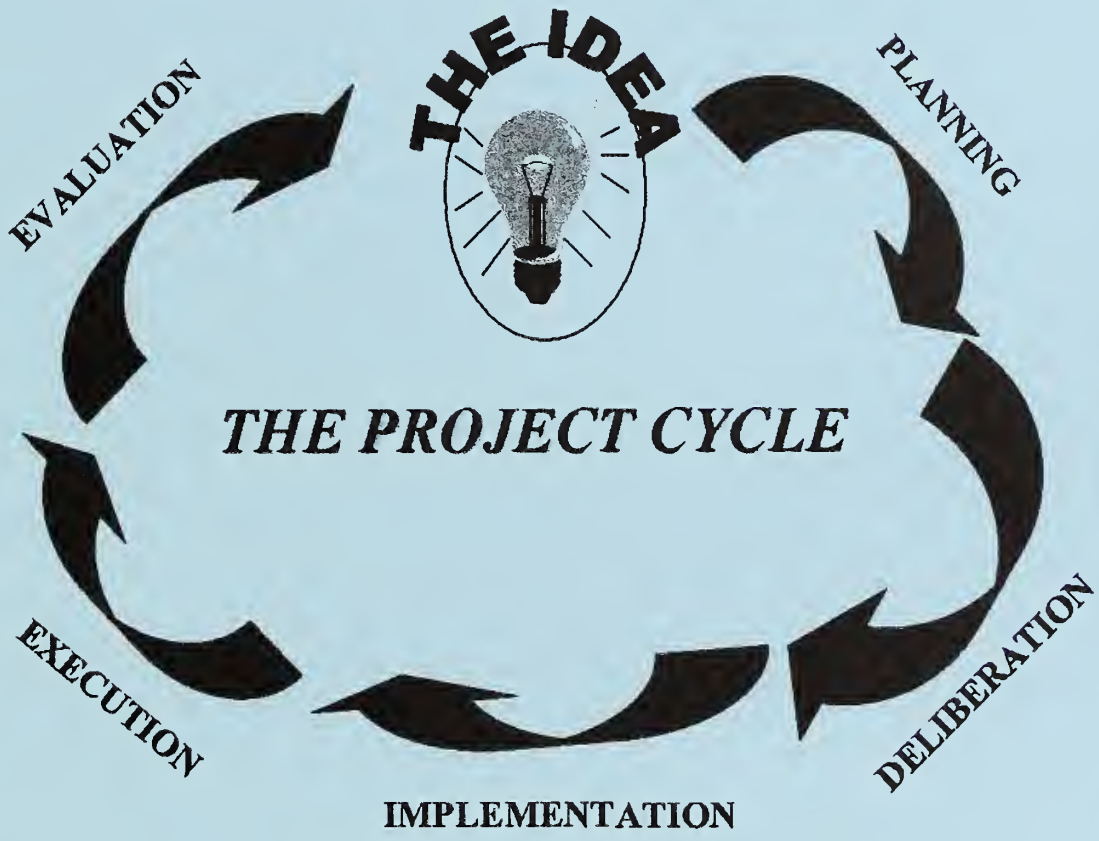
Cooperative Feasibility Study Guide



Preface

This guide has been designed to assist agricultural cooperatives in completing a feasibility study. Rather than being a complete handbook, this publication presents the important elements to consider when conducting a feasibility study.

The guide contains information on whether or not a group should conduct a feasibility study, the steps involved, how to evaluate a study, and how to implement one once completed. Tips on selecting and working with consultants are also provided.

A sample feasibility study outline is included for reference.

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Contents

Contents

Figures

Cooperative Feasibility Study Guide

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The Project Development Process

The feasibility study is an integral part in developing a business project. Whether it's for the creation of a new cooperative or the expansion of an existing one, the project cycle is similar. In "How to Start a Cooperative"(RBS CIR 7), Galen Rapp and Gerald Ely present a 16-step sequence of events recommended for creating an agricultural cooperative. This guide is an expansion of the seventh step, now to conduct the feasibility study.

For purposes of cooperative development, the components in this cycle can be divided into five basic stages (figure 1). Figure 2 summarizes activities that occur in each phase of the cycle.

Differing amounts of time may be required for each stage in the project cycle, depending on the particulars of the project and the group involved. Typically, it takes 2 years or even more for a cooperative project to move from preliminary planning to project execution.

Key aspects of the project cycle seem to recur during the development process. The information obtained in the evaluation stage provides the impetus for the idea pursued in the next round of planning. This cycle is a series of ever-improving estimates as to how the project will function. Each cycle provides more information. When evaluated and applied to the succeeding phase, ways to accomplish the project come into sharper focus.

Figure 1—**The Project Cycle**

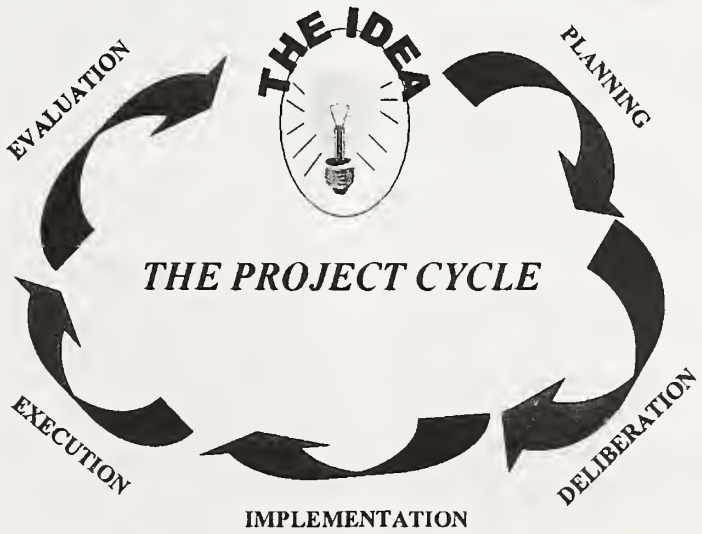

Figure 2—**The Project Cycle Described**

Identification:	preliminary idea creation, planning, and pre-feasibility studies to refine ideas.
Deliberation:	formalization of group, conducting feasibility studies, and decision to proceed.
Implementation:	securing capital, construction, obtaining permits, and hiring management.
Execution:	mobilization of manpower, equipment, and materials to carry out the plan.
Evaluation:	determine what did and did not work (to plan again).

One stage of the project cycle is deliberation. Planners' focus should be on whether to proceed with the project. The feasibility study should be conducted during this stage, before the group decides to implement or terminate the project. Planners need to know the requirements for a successful project. The feasibility study serves as an important tool for the group's deliberations.

Why Prepare Feasibility Studies?

Developing any new business venture is difficult. Taking a project from the initial idea through the operational stage is a complex and time-consuming effort. Most ideas, whether from a cooperative or an investor-owned business, do not develop into business operations. If these ideas make it to the operational stage, most fail within the first 6 months. Before the potential members invest in a proposed business project, they must determine if it can be economically viable and then decide if investment advantages outweigh the risks involved.

Many cooperative business projects are quite expensive to conduct. The projects involve operations that differ from those of the members' individual business. Often, cooperative businesses' operations involve risks with which the members are unfamiliar. The study allows groups to preview potential project outcomes and to decide if they should continue. Although the costs of conducting a study may seem high, they are relatively minor when compared with the total project cost. The small initial expenditure on a feasibility study can help to protect larger capital investments later.

Feasibility studies are useful and valid for many kinds of projects. Evaluation of a new business venture, both from new groups and established businesses, is the most common, but not the only usage. Studies can help groups decide to expand existing services, build or remodel facilities, change methods of operation, add new products, or even merge with another business. A feasibility study assists decision-makers whenever they need to consider alternative development opportunities.

Feasibility studies permit planners to outline their ideas on paper before implementing them. This can reveal errors in project design before their implementation negatively affects the project. Applying the lessons gained from a feasibility study can significantly lower the project costs.

The study presents the risks and returns associated with the project so the prospective members can evaluate them. There is no "magic number" or correct rate of return a project needs to obtain before a group decides to proceed. The acceptable level of return and appropriate risk rate will vary for individual members depending on their personal situation.

Cooperatives serve the needs and enhance the economic returns of their members, and not outside investors, so the appropriate economic rate of return for a cooperative project may be lower than those required by projects of investor-owned firms. Potential members should evaluate the returns of a cooperative project to see how it would affect the returns of all of their business operations.

The proposed project usually requires both risk capital from members and debt capital from banks and other financiers to become operational. Lenders typically require an objective evaluation of a project prior to investing. A feasibility study conducted by someone without a vested interest in the project outcome can provide this assessment.

What Is a Feasibility Study?

This analytical tool used during the project planning process shows how a business would operate under a set of assumptions — the technology used (the facilities, equipment, production process, etc.) and the financial aspects (capital needs, volume, cost of goods, wages etc.). The study is the first time in a project development process that the pieces are assembled to see if they perform together to create a technical and

economically feasible concept. The study also shows the sensitivity of the business to changes in these basic assumptions.

Feasibility studies contain standard technical and financial components, as discussed in more detail later in this report. The exact appearance of each study varies. This depends on the industry studied, the critical factors for that project, the methods chosen to conduct the study, and the budget. Emphasis can be placed on various sections of an individual feasibility study depending upon the needs of the group for whom the study was prepared. Most studies have multiple potential uses, so they must be designed to serve everyone's needs.

The feasibility study evaluates the project's potential for success. The perceived objectivity of the evaluation is an important factor in the credibility placed on the study by potential investors and financiers. Also, the creation of the study requires a strong background both in the financial and technical aspects of the project. For these reasons, outside consultants conduct most studies.

Feasibility studies for a cooperative are similar to those for other businesses, with one exception. Cooperative members use it to be successful in enhancing their personal businesses, so a study conducted for a cooperative must address how the project will impact members as individuals in addition to how it will affect the cooperative as a whole.

Feasibility Study Limitations

Although the feasibility study is a useful tool for project deliberation, it has limitations. There are several purposes for which a study cannot or should not be applied.

A study should be conducted to evaluate specific projects. Simulations or projection models, although useful, do not replace a specific feasibility study of a project. The study should not only consist of generic market information but also should be tailored for the specific project.

A feasibility study is not an academic or research paper. A completed study should permit a group to make better decisions about the strategic issues of its specific project. The study is not a business plan that is developed later in the project development process and functions as a blueprint for the group's business operations (Appendix A). The plan presents the group's intended responses to the critical issues raised in the study. The results form the basis for developing a business plan.

A study is not intended to identify new ideas or concepts for a project. These ideas should be clearly identified before a study is initiated. The group needs to accomplish a number of steps before a feasibility study is instituted. The closer the assumptions lie to the "real world," the more value a study will hold for the group.

A study should not be conducted as a forum merely to support a desire that the project will be successful. Rather, it should be an objective evaluation of the project's chance for success. Studies with both positive and negative conclusions can assist a group's decisions.

Financiers may require a feasibility study before providing loans, but this should not be the study's only purpose. It should enhance a banker's ability to evaluate a project. The primary goal should be to aid the group's decisions, not to secure financing.

A study will not determine if it is advisable to initiate a project. The potential members have to decide if the economic returns justify the risks involved in their continuing the project. The study results should assist them. A study analyzes basic project assumptions, shows how results vary when assumptions change, and provides guidance as to critical elements of a project. Conducting a study should provide the group with project-specific information and assist it in making decisions. This should lower the risks in continuing a project.

Creating a Feasibility Study

The creation of a feasibility study, although part of the project cycle, contains a process in itself. All studies have four key factors: project definition, group characteristics, group decisions, and feasibility study decisions.

Project Definition—In a successful cooperative project, a core group of people must feel the need to work together to solve a problem or take advantage of a business opportunity. Improving the situation as a group provides the context for a cooperative business project. This project must be understood. The group must believe it can achieve the goal. Often, a few individuals provide the spark for the idea, but group interaction permits them to hone its idea and develop sufficient interest. In addition, the group discovers common interests that can make a cooperative an effective organization.

The initial ideas of the group must have coalesced into a clearly stated project, before a feasibility

study can be conducted. The ideas also must have been developed to the stage where hoped-for goals can be quantified.

Cooperatives work best when participants see a mutual benefit from working jointly rather than acting alone to achieve a goal. Members voluntarily choose to belong to a cooperative because they see some potential benefit. When a project can be addressed jointly and potential member interest exists, then a cooperative can be the solution. A study is not needed unless there is a specific project. This project must be:

a. defined, understood, described, and quantified;
b. significant, broad, and large enough to warrant group action;
c. capable of a solution for purely economic and technical reasons;
d. economically, culturally, and socially fitting for the group; and
e. considered a reasonable solution by group members.

When all these elements exist in a project idea, a successful cooperative can be developed. If any are lacking, the concept must be revised before proceeding with the project.

Group Characteristics—For any cooperative project to be a success it must be large enough to achieve a "critical mass." That number depends on the product, scope, and economic resources available. Sufficient support is critical for developing a cooperative project. A smaller number of individuals who are fully committed to a project can have a higher chance of success than a larger number who are only partially committed.

Attendance at organizational meetings, survey results expressing support, and willingness to work to develop the project are needed to demonstrate support. Financial backing of members is perhaps the best method that a group has to express that support. A feasibility study seeks to determine the number of members or product volume required for the project to succeed.

Advisors and consultants can be useful to a group during its formation. This assistance may come from outsiders such as Extension agents or lenders who interact closely with the group. This assistance may be in a specific area such as bookkeeping or legal structure with the help provided by accountants and lawyers. The group may seek outside help to focus its ideas or with strategic planning and organization. Advisors such as USDA cooperative development specialists can guide the group through the development process. They can also help to assure that all the members' ideas are considered.

Outside advisors, while useful to the group, should not drive the process. The project should be developed for the group's benefit. Leadership should come from within the group and it should make the final decisions on the project's direction. Outsiders, no matter how well intentioned, should not fill this role.

Group Decisions—Strong leadership is essential for defining the project and deciding if a feasibility study should be conducted. Outside assistance can be useful, but the project's vision and direction should come from the group. Informed leadership with enlightened self-interest and a commitment to group action is needed. Leaders must maintain sufficient creative stress to bring all parties to a decision about continuing with a feasibility study.

Strong leadership is necessary, but for a project to succeed, all potential members of a new cooperative business venture must be informed so they feel committed to the project. One or a few aggressive individuals may cut short the deliberation process and force a premature decision. To prevent this, the group should form a steering committee of the most active members to guide the project development process. This committee should keep the group informed on the project's progress.

Decision-makers should take a simple test that provides a good guideline: (1.) If I choose an action and my decision proves to be wrong, what would be the cost? and (2.) If I make no decision, what would it cost? If the cost of making a wrong decision is relatively small, do not spend much time, money, or effort on the decision-making process. On the other hand, if the cost of committing an error could be large, it's better to put more emphasis on determining the pros and cons before choosing.

In practice, that is not easy to implement, especially with groups where each member has an individual personality and decision-making method. Some may be slower to learn, need time to contemplate before taking a decision, have aversions to high risk, or believe that time and money spent to research a project are a waste. Some members may want to decide before relevant information has arrived. Balancing these diverse sentiments within a group can be difficult.

Decision-making often is one of the greatest initial challenges that a group faces in developing a pro-

Figure 3—**Guidelines for Group Decisions**

- Unanimous agreement is not required to move forward.
  - Never decide to proceed based solely on negative reactions, such as resentment or envy toward middlemen, lenders, etc.
  - A few reliable persons are superior to a larger number of doubtful persons.
  - Avoid promises of what the cooperative can do.
  - Base expectations on economic and social realities faced by the cooperative.
- Make each decision only once.

Figure 4—**Decisions for Feasibility Studies**

- Conduct the study?
- Idea identification and clarification.
- Study assumptions.
- Who conducts the study?
- How to review the study.
- Accepting the completed study.
- Implementing an accepted study.

ject. Figure 3 presents some guidelines to assist groups with the process. The ideas can help to create a system for making decisions. This should permit positive progress in the development of the project.

Given the difficulty in making decisions, some groups or individuals try to avoid it. This tactic is not recommended. Not making or postponing a decision are decisions in themselves. There is always more information that can be gathered, but there is also a cost to taking more time to deliberate. A decision must be made when further investigation costs more than new information is worth.

Feasibility Study Decisions—There are moments when the group has to make key decisions. Taking the time to think through each of these decisions can increase the value of a feasibility study. Decisions listed in Figure 4 have a logical flow and are presented in chronological order discussed in the following sections.

Conduct the Study? Often groups proceed directly to the feasibility study and overlook the importance in making this first decision with deliberation. Take the time to determine if a feasibility study is appropriate. Moreover, if this decision is conducted thoughtfully, the group will probably have established a procedure for decision-making. Then, the decisions that the group needs to make later in the development process will probably come easier and the likelihood of being correct will be greater.

Carefully consider whether to conduct a feasibility study will save much time and money and increase the study value once completed. No group has unlimited resources. The study is a critical tool in project development, so money spent on it reduces the amount available for project development areas. The study should return the maximum benefit to the group for the money invested.

Idea Identification and Clarification—Prior to initiating a feasibility study, the group needs to sketch out possible design of the project. This can begin with the "back of the envelope" calculations and proceed through a formal pre-feasibility study for complex projects. Begin by accumulating information needed to focus the direction of the project.

In many cases, more than one idea has been suggested as potential projects. Some concepts may be impractical or appear good on the surface but are not possible when further studied. Some may require more explanation. Delve into the proposed ideas to extract the most advantageous elements of each. Typically, the most successful projects combine the best aspects of many different ideas into one clearly defined project. This initial elaboration provides a framework to develop the project. If indications are positive, this framework can be expanded with a comprehensive feasibility study.

The steering committee and internal decision-makers normally perform this task. Gathering the needed information for this preliminary evaluation begins with identifying an idea. The group and possibly its advisors work together to gather preliminary information. It can be discussed informally or presented in a formal document. In either case, the information gathered will be needed later if the group proceeds with a feasibility study.

Study Assumptions—Key project assumptions should be determined prior to initiating a feasibility study. It cannot analyze every variation of a project, so the group must provide study boundaries. At a

Figure 5—**Feasibility Study Assumptions**

Is the project needed?

- What is the product or service? What is the essence of the project? (There can be more than one. Each should be clearly defined.)
- What is the group's comparative advantage? What is the market demanding and what do producers do well?
- How will the project benefit the members?
- Have the potential members determined the need or are others promoting it?

What is the potential membership base and volume of product for the project? (This is normally supported with a member survey.)

- What is the support by producers, community, and potential lenders?
- What is the number and size of producers who are willing to participate?
- What volume of product will be included in the project?
- What future expansion of both membership and volume is possible?

What is the competitive outlook?

- What will prices be for both inputs and outputs?
- What is the anticipated volume of sales?
- What is the size of the market?
- Who are the major competitors? What are their market shares, facilities, and business structures?
- Will the group use strategic alliances to accomplish its goals?

What are the organizational needs for the project?

- What are the capital needs and possible sources of this capital? How much money is needed?
- What are the budgeting and financial needs? What are possible sources for financing?
- What are the legal requirements? What documents or agreements are needed? What permits and inspections will the project require?
- What facilities are needed? Will the group purchase, build, or lease the facilities?
- What are management requirements? What skills will the cooperative require of a management team? What will this management cost? Can producers pay enough to attract good personnel?

minimum, the group should be able to provide general answers to the four questions presented in Figure 5. Examples of the type of information where the group may already have information or need to make assumptions are included.

Obviously, the group might not know the exact details of all project aspects. Several options may seem possible so the group must gather more information that permits it to decide among them. Considering more than one possible structure is not a problem at this stage. However, the group should strive to answer the four questions for each possible project scenario. The feasibility study can help the group to reach a decision between project options or to see economic outcomes from different situations. The more focused the project design before implementing a feasibility study, the more likely the study will be of use.

Who Conducts the Study—Although in principle it is possible for a group member to conduct the feasibility study, outsider consultants produce most. Prospective members and financiers see the objective evaluation of a project concept with a feasibility study as an important aspect of the study. This objectivity can provide a group with helpful information that might have been overlooked by those participating directly in the project.

Hiring a consultant to create the study can be the most important decision in the creation of the study. A group should use a good consultant for the project. Figure 6 provides possible criteria for selecting a good consultant. A group should determine if a consultant is technically qualified to create a feasibility study. In addition, a consultant must have the demeanor to work well with a particular group. (See Appendix B for a sample of a consultant selection guide.)

Does the consultant have an adequate background to prepare the study? The group should review

Figure 6—**Criteria of a Good Feasibility Study Consultant**

- Previous experience conducting studies.
- Experience with the industry to be studied.
- Understands cooperatives.
- Willingness to listen to the groups' ideas.
- Works closely with designated contact members of the group.
- Accepts reasonable study revisions
- Accomplishes the study within an agreed deadline.
- Works within the group's designated budget.
- Provides clear, useful information in the completed study.

samples of previously prepared studies and speak with others for whom the firm has worked before contracting with them.

A project of sufficient size and complexity may require several consultants to complete various aspects of the study. Multiple consultants can reduce the group's dependency on a single person or company. It also can permit the group to select experts from several fields. However, it also can complicate the coordination and consistency of the information received.

Consultants should have experience in the industry under study. Otherwise, they may not correctly identify critical factors. Given business complexity, it is almost impossible for one person to have experience in all areas. Some consulting firms resolve this issue by having feasibility specialists and contracting with industry experts to create a feasibility study. A team approach may result in a better study. For example, a cooperative development specialist from the USDA could work jointly with industry specialists to create a feasibility study.

The consultant should also understand the unique aspects of cooperatives. Tax implications and business considerations of cooperatives differ from those of other businesses. These factors could decrease or increase project risks.

The consultant should avoid pre-conceived notions about how the project will function. The study should not be an "off-the-shelf" document assembled from previously created studies. Rather, the consultant should pay particular attention to the ideas that the group has developed and craft a unique study suited to the group's needs. The consultant should work closely with the group and be receptive to its suggestions. Also, the consultant should be prepared to make technical revisions or to correct errors at the group's recommendation. Revisions are a normal part of the process.

Revisions should focus on the validity of the assumptions and the technical design of the study. Using an outside consultant brings objectivity to the feasibility study rather than merely providing the results that the group wants. Consultants have a legal obligation to provide a responsible analysis. They should not be asked to alter the results merely to conform to members' desires for a project's viability.

Timeliness is an important consideration when selecting a consultant. Projects are time sensitive. Usually, decisions to proceed await information provided in the feasibility study. So care and diligence required for a well-crafted study must be balanced against the desire for speed. If a qualified consultant cannot complete a well-designed study within a timeframe that serves the group's needs, it should not be used. On the other hand, the timeline must be realistic. A consultant can only progress as fast as a group makes the required decisions, provides information to the consultant, and carries out its other project responsibilities.

Cost is an important factor. The expertise and skills that consultants offer a project must be weighed against their cost. A quicker timeline could increase a consultant's fee. Preparing a pre-feasibility analysis may decrease the effort required to complete the feasibility study and reduce the cost.

Some public programs offered by the USDA's Rural Business-Cooperative Service, community development offices, the Small Business Administration, and local business incubator programs provide technical assistance at little or no cost to groups creating feasibility studies.

A consultant should provide the data used to generate the financial tables and scenarios reported in the feasibility study and preferably an electronic spreadsheet format that can be easily manipulated. Although requesting this information can moderately increase the cost of a feasibility study, access to the actual data permits the group to use the information for later needs with greater flexibility. This data also can reduce the cost in creating the business plan, if the group proceeds to that stage. It can also decrease the effort required for revisions, if in the future the group changes the project to differ from those in the study.

Once the consultant has been selected, the group should provide detailed instructions on the study requirements. A paid consultant should be hired with

a legally binding contract between the parties. The group should consult legal counsel for assistance. The contract should state clearly the requirements and role of both the group and the consultant. It should have timelines, delivery dates, explicit deliverables, and what is to be accomplished before payment is made.

Often, the consultant receives a down payment before the feasibility study has been conducted. The balance is paid only after the study has been reviewed and accepted by the group (and possible financiers if appropriate). This gives the group more leverage to encourage timeliness or revisions. The contract should designate a third party arbitrator to resolve any disputed items.

Before signing the contract, the group should discuss with the consultant arrangements for cost overruns, time delays, revisions, and what considerations will be made for these issues. Changes after signing the contract can be costly or delay the study results. So all parties should be clear about what to expect prior to initiating the study.

How To Review the Study—Selection of the consultant does not end the group's responsibilities. A qualified member or a small committee should be designated to work closely with the consultant. These members work to assure that the feasibility study presents the group's ideas. They should track the study at all stages while reviewing and clarifying ideas during the study development process.

Members with appropriate backgrounds and the ability to commit sufficient time to working with the consultant should be selected. These contact members represent the group's interests to the consultant. They are the contact to provide clarification and additional information that the consultant may require. Plus, they should provide periodic reports to the group about the feasibility study's progress. They also should work with other group members and advisors to gather the information needed for the feasibility study. These members are obliged to express the wishes of the entire group and not just their own.

Members or outside financiers will often perceive the reliability of the entire study based on its least accurate piece. An otherwise well-conducted feasibility study could be viewed as inaccurate or useless because of a simple mistake. To prevent this, the feasibility study should be carefully examined for overall clarity and logical consistency—is the language appropriate; is the document well organized; and can someone who is not familiar with the project understand the study? Reviewers should confirm and explain the study assumptions.

The feasibility study report documents project efforts. It serves as the written representation of the group. It outlines relevant conclusions from the study. Potential members, financiers, and others will use this document to help determine their support for the project. The report's appearance as well as its content can influence people's perception of it. The layout should be professional, well organized, and include a table of contents, page numbers, and references. Appendix C provides a sample report outline.

Although the contact members take the lead in working with the consultant, others should review the study carefully before the group decides to accept it. Advisors such as cooperative development specialists or Extension agents can provide an objective review and offer insights on content or study assumptions. This outside review can be especially useful when the group has used consultants to prepare the report. Often, a series of draft reports are presented to the group as the study proceeds. Changes are then conveyed to the consultant.

Accept the Completed Study—The consultant normally prepares a final report of key findings and recommendations. The group usually makes the preliminary decision to accept or reject the study. Often the contact members, who have been working with the consultant and have the most knowledge of the feasibility study, make a recommendation to accept or reject. The final decision rests with at least the steering committee and often is presented to entire group.

Study approval should be based on its technical merits. Does it fulfill the work expectations that the group had when contracting with the consultant? Do the project ideas substantially differ from the group? Does the study contain significant errors? Is the study sufficiently comprehensive to permit the group to make informed decisions about the project? If key information is lacking, the study should be revised.

The decision to accept or reject a consultant's work should not be influenced by the results of the feasibility study. A well-crafted, but negative study can prevent learning the same information later in the project process at considerable trouble and expense. By the same token, a feasibility study with positive returns should not be accepted merely because it makes the project seem possible.

Written records of the decision-making process should be made and retained. Group members have a legal responsibility for due diligence. The group's attorney should be apprised of project developments and provide appropriate legal counsel.

Implementing an Accepted Study—Once the study has been accepted, the group must decide to implement or modify the project idea. This is often the time that the group must choose between competing project ideas. The feasibility study is an important tool used to assist this decision, but the group should not ignore other relevant factors such as project risk and if the project fits with the group's purpose. At this stage, the group can decide to implement, revise, or halt the project. In most major projects, the determination to implement is decided by the entire membership.

Timing often is an issue that can affect the decision to proceed. From the moment a feasibility study is initiated to the time a project is implemented, both positive and negative factors can change.

Positive results from a feasibility study do not necessarily imply that the group should proceed with the project. Several factors could cause the group to stop or to revise the project:

- the situation has worsened since work on the study was completed;
- the group chose another project it considered more beneficial;
- the risks required might be greater than the group is willing to accept;
- capital, size, or capacity requirements are more than the group can accommodate;
- outside information shows key study assumptions are faulty; or
- the study or the consultant may lack credibility.

However, negative study results do not necessarily signify that a group should stop developing the project. The group may cautiously proceed even if study results are negative. However, any decision to continue should carefully weigh the risks involved. Here are some reasons for the group to consider continuing when the study did not provide favorable results:

- the situation has improved since the study was completed;
- critical assumptions of the study are unduly harsh or negative;
- more persons or volume are included in the project, increasing it to viable levels;
- the group has found a partner to share the cost, risk, capacity, etc; or
- technical limitations or machinery or design have been resolved.

In most cases, if major changes occur to the project idea as presented in the feasibility study, the group should revise it to reflect these changes or initiate a new study. This permits the group members to make decisions with all applicable information.

Some groups may proceed to develop a business plan with negative issues still pending. For example, a group may need greater volume of production for success, but feels that more producers will participate once the project is closer to implementation. A group should review the potential risks of pursuing this type of strategy.

Feasibility Study Report—This report defines the project under development. It presents a series of assumptions on the design of the technical, financial, and operational aspects of the project and supports them with figures and tables. It also includes the pro-forma financial statements to project income and expenses.

The appearance of the report will change depending on the project, the group, and the consultant who prepares the study. The document should describe project efforts to date and why it should be continued. The report should answer the following questions about the project:

- where is it now?
- where does the group want to go?
- why do they want this?
- how will they accomplish this?
- what resources are needed?
- who will assist them?
- when will this be completed?
- how much will this cost? and
- what are the risks?

There is no required length for a study report, but it should follow a simple format while still including the information required helping the group reach a decision. The primary points should be presented with supporting documentation in the appendices. Appendix C shows how a feasibility study could be designed. Differing industries or projects have differing needs. The design of each study should serve the needs of the group or other clients.

Although the study appearance may vary, all reports require particular elements if they are to be considered a complete feasibility study. They should

present a "holistic" view of the entire project. While specific project details may be undecided, a project's potential for success or failure must be included.

All studies must start with certain assumptions. The closer they are to reality, the more valuable the study. If assumptions are overly optimistic or simplistic, members and investors may not value the results. A feasibility study should distinguish clearly between the hard facts and the assumptions. The sources for the facts and the rationale for key assumptions should be noted in a study appendix.

A feasibility study should present the environment where the project will occur and describe its scope. The description should include the need for the project and how the group can accomplish the goals. The scope should include the key elements of all aspects of the project. Potential reaction by competitors should be included in the study.

Key elements will change depending on the nature of each project. As a rule of thumb, if reasonable changes in a factor could make the project change from successful to unsuccessful, it is a key element. Examples could be the technology of production, volume of inputs, the market for goods sold, marketing channel, personnel cost, prices paid, and capital costs.

A feasibility study should vary the possible results with changes in key elements of the project. This controlled variation, called scenario analysis, permits planners to view which project elements are the most susceptible to positive and negative changes. This analysis also shows the impact on results of changes in the assumptions. The study should always include the rationale for scenario selection. Both "worst-case" possibilities and optimistic scenarios should be compared. Comparative results from scenarios are often presented in tables.

A feasibility study report should indicate if the project design is technically possible. It should also show that the desired technologies could work in coordination. In projects with unproven technologies, this can be the most important aspect of a study. In projects with proven technologies, the study can serve to correct design flaws before costly mistakes are implemented.

Possible economic outcomes should be a prominent part of a feasibility study. Variation in these elements should be included in the scenario analysis. Operating costs and net revenues are factors that show if the project is economically viable. The study should contain pro-forma balance sheets, operating statements, benefit-cost ratios, projected cash flows, and internal rates of return for the project. These are normally based on a 3-year projection.

The study should include possible project risks for potential members and other investors; project technology; potential legal and governmental setbacks; management and labor resources; and time-critical factors. Most importantly, the feasibility study should enable members to make constructive, informed decisions on whether to proceed with, revise, or abandon the project.

Bankers' Considerations—A cardinal rule in banking is to borrow from a lender who understands your business; or, conversely, never to lend money on a business project that you do not understand. Even though most groups involve their banker early in the process, a feasibility study is often conducted with an eye toward explaining the project to potential financiers. Bankers may have different requirements from the study than group members. In many cases, the feasibility study is the formal project presentation to a lender.

Many groups work with bankers with whom they have an established personal or business relationship. This may expedite the process of obtaining financing. Nevertheless, the banker must know and understand the unique aspects of cooperatives.

Bankers' primary concerns focus on repayment, the bank's exposure, and a project's strengths and weaknesses. Bankers classify these concerns into the "5-C's":

- Capacity—What is the group's ability to repay the loan?
- Capital—What assets are being financed with the loan and how much is requested?
- Character—Who are the principals of the project? What is their background?
- Collateral—What is being used to guarantee the loan? How is it valued? and
- Conditions—What additional factors can affect the loan?

The odds for financing diminish if a banker cannot understand the basics of the project. The study should contain an executive summary and a financial blueprint so the banker can more easily understand the project. The executive summary should be short and to the point, but still provide an overview of the project. The financial blueprint gives information

Figure 7—**Bankers' Considerations for Feasibility Studies**

The executive summary should contain:

- Project purpose. What is it and who is involved?
- Repayment capacity. Can the investment to be recovered over a specific time period? Does it give investment (cost) parameters? Can it convince bankers the investment is needed, even if it is marginally feasible?
- Projected Financial Returns. What are projected revenues, operating costs, and net income?
- Economic Benefits. What is the return on investment and the internal rate of return of the project

The financial blueprint package should contain:

- The assets to be financed.
- What is the project's funding potential and repayment terms? What is the rate of conversion to cash-liquidity?
- What are internal (yields, costs, etc.) and external (inflation, energy, etc.) project risks? What if the key assumptions are not perfect? What is the group's risk exposure?
- Evaluate economic consequences. Do net reserves cover capital cost? Does the plan keep the project from capital erosion?
- What are the projected cash flows, operating statements, and balance sheets? What are the source and use of funds
    - Financial commitment of members
    - Documentation. What rationale is used to support the assumptions?

required for calculating project risk and exposure on loans. Figure 7 provides more detail on what these sections should contain.

The feasibility study should present information that serves both potential financiers and members. While bankers are potential clients for a study, it should not be conducted merely to prove to them that a project is viable. However, success or failure hinges on adequate financing. Consult with a banker prior to conducting a feasibility study to determine what factors the banker wants to see developed. This can speed the time that a bank needs to approve project financing or even improve the possibility of securing financing.

Implementing a Project—During project development, it is important to plan ahead to avoid problems that can occur during implementation. The group should plan ahead even when many current decisions need to be made. Implementation is a particularly critical stage for a project. Although the group may feel overwhelmed or exhausted by this stage, they should not lose sight of the long-term horizon of the project. Using an implementation plan can assist the group during this tumultuous period. The organizational, legal, and financial matters must be well handled from the very beginning. Appendix D lists issues to consider when implementing a feasibility study. Not all projects will require every detail listed.

Often, the group appoints special committees to monitor the project progress in specific areas—finance, legal, facilities, and marketing. These committees become the primary ways to report on progress in specific aspects of the project. Members are informed and educated about the subtleties of the project. This helps to build project support and understanding of any delays or cost overruns.

If the project requires construction of a sophisticated facility, such as a meatpacking or soybean processing plant, professionals such as an architectural, engineering, or management specialist will need to be consulted early in the process. The needed expertise would be described in the feasibility study. Assistance will also be used for loan agreements, legal contracts, and construction.

In many of the new generation cooperatives, management is hired early in the process even before the feasibility study has been completed. This can assist the project development although it considerably increases early project development costs. William Patrie, in his "Creating Co-op Fever: A Rural Developer's Guide to Forming Cooperatives" (RBS Service Report 54); provides information on this cooperative structure.

Once the project achieves a certain level of activity, the group hires a manager or project director. This

person should make the day-to-day decisions for the project. The board of directors should determine the general guidelines of these decisions. The manager must ensure the work meets specifications, construction proceeds on schedule, and monitor changes or delays. Obviously, more expensive and technical projects will require a highly skilled manager.

The elected directors or steering committee members must monitor the project's progress. While the assistance of committees and managers can be helpful, the group must make the final decisions on the project guidelines. They have been selected to represent the entire group.

Background Information Sources—Several sources can guide groups considering a cooperative project. Both "How to Start a Cooperative" (RBS Cooperative Information Report 7) by Galen Rapp and Gerald Ely and "Co-ops 101, An Introduction to Cooperatives" (RBS Cooperative Information Report 55) by Donald Frederick are good references available from USDA's Rural Business-Cooperative Service. Another good source is the University of Wisconsin Center for Cooperatives website: **http://www.wisc.edu/uwcc**. Outside advisors can assist in the development process and provide other sources of background information.

Appendix A

The Feasibility Study vs. the Business Plan

Groups often confuse the role of two tools used in project development—the feasibility study and the business plan. Each has common components. Assuming positive feasibility study results, much of its information is incorporated into the business plan. It also contains other aspects.

The feasibility study is conducted during the deliberation phase of project development before financing is secured. It shows if the project concept can be viable. This analytical tool includes several scenarios for the group to use in determining if it continues the project. If, after completing a feasibility study, the group decides to not proceed, there is no need to create a business plan.

If the group decides to proceed, it prepares a business plan for project implementation. The plan serves as a blueprint not only for implementation but also for what actions the group will take during project operations. The business plan usually contains less emphasis on scenarios than the feasibility study. Typically, it elaborates only the scenario selected by the group as the most promising. The business plan is much more focused on what action steps will be taken during and after project implementation.

The business plan is created after the feasibility study. Project details, which required assumptions for the feasibility study, have been decided. Standard business plans include details such as key management personnel, business location, the financial package, product flow, and possible customers.

The feasibility study presents an independent review of the project, so persons from outside of the group normally complete it. In contrast, the group typically develops its business plan internally. The group revises the plan with information from bankers and investors once the project situation becomes more defined.

Although this difference is not as important for project development considerations, the feasibility study is only applicable for the developmental stage of a project. Businesses continue to use and revise their business plans after a project has been implemented. As the feasibility study refines the group's initial ideas, the business plan uses information from the study to further prepare the project to evolve into an operating business.

Appendix B:

Sample Feasibility Consultant Selection Criteria

		Points Awarded
• Previous experience creating feasibilitystudies	(0-20)	_____
• Knowledge of the industry to be studied	(0-15)	_____
• Qualifications of principal researchers or team	(0-10)	_____
• Understanding of the cooperative structure	(0-10)	_____
• Proposed interaction with designated members	(0-15)	_____
• Verbal presentation/communication skills	(0-10)	_____
• Reasonableness of cost	(0-15)	_____
• Miscellaneous intangible	(0-5)	_____
Total Score	100	☐

Adapted from USDA's RBS Service Report 54, "Creating Co-op Fever: A Rural Developers Guide to Forming Cooperatives."

Appendix C:

Sample Feasibility Outline

A. Executive Summary

B. Table of Contents

C. Summary of the Important Findings and Recommendations:
   1. Setting, Purpose, and Description of Project
   2. Market Potential and Source of Production Supplies
   3. Technical Features
   4. Schedules of Net Benefits and Capital Requirements
   5. Benefit-Cost Ratios and Internal Rate of Return
   6. Project Benefits and Costs
   7. Proposed Financial Plan and Projected Cash Flows
   8. Recommendations for Implementation

D. Description of the Project:
   1. Nature of the Project (technical processes, general size and location, what is produced, supplies, time horizon, etc.)
   2. General Setting of the Project Location.
   3. Proposed Ownership, Structure, and Management
   4. Markets to be Served and Existing Suppliers
   5. Supplies and Competitive Users
   6. Staffing Requirements and Sources

E. General Setting and Need for Project:
   1. Physical, Economic, and Social Characteristics (members and community) of the Project Area
   2. Regional, National, and International Economic Relevance to Project
   3. Relevant Governmental Policies and Programs
   4. Description of the Problem Situation (which would be solved by the project)
   *5. Impact and Consequences on Members (and the community if needed)
   6. Sampling Procedures and Survey Techniques Used to Support Project

F. Market Potential for Goods or Services, Markets Served (current and future):
   1. Form and Quality of Product or Service, Markets Served, and Channels Used
   2. Projected Total Demand in Markets to be Served
   3. Projected Competitive Supplies and Services
   4. Sales Potential and Projected Sales Prices
   5. Marketing Plan and Projected Marketing Costs

G. Raw Material Supply Potential/Procurement Plan:
   1. Form and Quality of Materials Required and Potential Supply Sources
   2. Projected Total Supply from Members and Non-members
   3. Projected Competitive Demand
   4. Procurement Potential and Projected Prices
   5. Procurement Plant and Projected Costs
   6. Form of Commitment of Raw Materials, Marketing Agreements, etc.

H. Supply of Labor and Other Key Inputs:
   1. Form and Quality of Labor and Other Inputs Required
   2. Projected Total Supply from Sources Planned
   3. Projected Competitive Demand for Inputs
   4. Acquisition Plan, Training Program, and Projected Costs

I. Technical Characteristics and Specifications:
   1. General Design and Technical Requirements
   2. Comparing Design and Expected Performance with Existing Operations
   3. Reasons for the Advantages of the Design Selected
   4. Proposed Sources of Supply and Method of Acquisition
   5. Proposed Procedures for Quality Control and Construction Performance
   6. Estimated Costs and Sources on Which Estimates Are Based

J. Development Schedule and Production Plan:
   1. Citical Points in Sequence of Development and Construction
   2. Detailed Development and Construction Calendar
   3. Procedures for Controlling Development Schedule
   4. Production Startup and Initial Performance (or Yields)
   5. Schedule of Transition to Full Production and Controls to Ensure that Schedule Will Be Met
   6. Development and Production Plan Schedules

K. Capital Requirements and Investment Schedule:
   1. Estimated Capital Cost for Major Facilities and Equipment
   2. Estimated Capital Cost for Marketing and Related Facilities
   3. Replacement Schedules for Equipment and Facilities
   4. Estimated Working Capital Requirements
   5. Schedule of Estimated Total Capital Investment

L. Sales Plan and Revenue Schedule:
   1. Seasonal Patterns of Product Demand and Prices
   2. Storage Program and Projected Monthly Sales Schedule
   3. Projected Net Monthly Product Prices
   4. Projected Revenue Schedule for the Project Planning Period
   5. Pooling Arrangements

M. Projected Operating Costs and Net Revenue:
   1. Raw Material Costs
   2. Labor Costs
   3. Other Supply Costs
   4. Management and Related Costs
   5. Repair and Maintenance Costs
   6. Costs for Research and Development, Overhead, and Other Service Functions
   7. Combined Annual Operating Costs
   8. Projected Net Revenue for the Planning Period

N. Schedule of Net Benefits - Partial Budget:
   1. Schedule of Added Net Income From Project
   2. Schedule of Net Revenue Replaced by Project (if a renovation project)
   3. Schedule of Combined Total Net Benefits from Project

O. Economic Feasibility of Project:
   1. Present Value of Investment and Net Benefits at Alternative Discount Rates
   2. Benefit-Cost Ratios and Internal Rate of Return for Project
   3. Sources and Schedule of Benefits Associated with the Project
   4. Sources and Schedule of Costs Associated with the Project
   5. Present Value of the Combined Schedules of Associated Benefits and Costs
   6. Project Potential in Relation to the Opportunity Cost of Capital and Summary of Economic Feasibility
   7. Sensitivity Tests: What if Prices and Costs Vary
   8. Other Financial Ratios as Needed

P. Financial Plan for Project:
   1. Proposed Equity Investment by Source of Funds

2. Proposed Sources, Schedule, and Terms of Loans for Meeting Balance of Capital Requirements
3. Projected Cash Flow by Sector under Proposed Financing Plan
4. Projected Schedules of Depreciation, Interest and Taxes
5. Pro-forma Balance Sheets and Operating Statements (3 years)
6. Pooling Arrangements
7. Pro-forma Source and Application of Funds
8. Summary of Financial Plan and Recommendation for Implementation
9. Impacts on Members: Impact on the Cooperative

Q. Appendices and Notes:
1. Resume or Credentials of Person or Company Who Completed the Study
2. List Key Assumptions and Validations for Their Use
3. List Footnoted Sources for the Document

(Revised from Internal RBS Staff Papers)

Appendix D:

Feasibility Study and Business Plan Implementation Considerations

I. Fiscal and Legal Responsibilities of Members:
- A. Incorporate - (if new cooperative)
- B. Pass bylaws - (if new cooperative)
- C. Amend bylaws – (if required for an existing cooperative)
- D. Provide equity capital
- E. Sign marketing agreements
- F. Elect directors - (if new cooperative)
- G. Vote to implement project

II. Legal Actions or Decisions of Board of Directors:
- A. Proceed with project
- B. Select lender and apply for loan
- C. Establish committees of members
- D. Hire manager
- E. Engage attorney
- F. Employ auditor
- G. Engage architect, project engineer, and/or general contractor
- H. Establish bidding procedures
- I. Hire consultants
- J. Get clearances from various governmental agencies to proceed with project

III. Financing:
- A. Loan closing
  1. Sign of documents
  2. Review special provisions (all loan agreements will include a number of special provisions that must be followed. Both borrower and lender should understand these covenants.)
  3. Line of credit. Drawing of fund schedule
  4. Repayment terms
- B. Bank accounts
  1. Bonding
  2. Escrow account
  3. Keeping lender informed of unusual events

IV. Legal Matters of Project:
- A. Loan closing
- B. Contract bidding
- C. Preparing or reviewing all contracts with all contractors working on project

D. Helping secure clearances for project zoning, health, EPA, water, sewage, etc.
E. Mergers/consolidations

V. Project Manager:
A. General manager of cooperative
B. Project architect or engineer
C. General contractor

VI. Preparation of Facility:
A. Recommendation of the manager
1. Shakedown and trial runs
B. Acceptance by the board of directors
1. Warranties
2. Escrows
C. Dedication of project

VII. Begin Operations
A. Training employees
B. Monitoring of operation by appropriate engineers
C. Changes in operating procedures
D. Full operation

VIII. Evaluation of Project

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Rural Business–Cooperative Service (RBS) provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The cooperative segment of RBS (1) helps farmers and other rural residents develop cooperatives to obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs. RBS also publishes research and educational materials and issues *Rural Cooperatives* magazine.